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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/866,626	05/30/2001	Hisayuki Furuse	040302-0269	5535

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EXAMINER
NGUYEN, HANH N

ART UNIT	PAPER NUMBER
2834	

DATE MAILED: 01/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/866,626	FURUSE, HISAYUKI
	Examiner	Art Unit
	Nguyen N Hanh	2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 October 2002* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) *1, 14-21* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 May 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *5* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Election/Restrictions

1. Newly submitted claim 14-21 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

   I. Claims 2-12 drawn to the rotor and stator structure, classified in class 310, subclass 112.

   II. Claims 14-21 drawn to the stator structure, classified in class 310, subclass 254.

2. The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed (Group II) does not require the particulars of the subcombination as claimed because the combination (group II) does not require the first and and the second rotor rotatably disposed in a concentric relationship to form a three layer structure. The subcombination (group I) has separate utility such as a plurality of stator coils wound around the stator core respecttively.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 14-21 withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in-
> (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
> (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

3. Claims 2-5,7,9-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Nakano.

Regarding claim 2, Nakano shows stator support structure for an electric rotary machine comprising: a divided-coil type stator (Fig. 7) including a plurality of divided stator cores (21) and a plurality of stator coils (15 in Fig. 2) wound around the stator cores, respectively;

a first rotor (37 in Fig. 2) disposed inside the divided-coil type stator;

a second rotor (38) disposed outside the divided-coil type stator;

a first stator support member or first stator support means supporting one side of the divided-coil type stator (46 in Fig. 2 and Col. 3, lines 37-39);

a second stator support member or second stator support means (45) supporting the other side of the divided-coil type stator; and a plurality of positioning projection members (bolts 43 to position stator core 20 projects from front to rear stator support member) which are located between the first and second stator support members or

support means, wherein the divided-coil type stator, the first and second rotors are rotatably disposed in a concentric relationship to form a three-layer structure (Fig. 2), and both distal ends of the respective stator cores are rigidly supported with the first and second stator support members or means with a given equal distance, and wherein each of the positioning projection members (43 in Fig. 2) remains between adjacent stator cores to allow the stator cores to be positioned with the given equal distance. (as can be seen clearly in Fig. 4,5 7, the positioning projecting members or bolts 43 are distributed at equally angular spacing, remains between adjacent stator cores 21 to allow the stator cores to be position to the motor housing with the given equal distance).

Regarding claim 3, Nakano also shows a stator support structure for an electric rotary machine wherein each of the positioning projection members (43) has a length extending between the first (46) and second stator support members (45).

Regarding claim 4, Nakano also shows a stator support structure for an electric rotary machine wherein each of the divided stator cores (21 in Fig. 8) is press fitted between the adjacent positioning projection members.

Regarding claim 5, Nakano also shows a stator support structure for an electric rotary machine wherein the stator cores are integrally supported with and coupled to the first and second stator support members by a plurality of fixing pins (bolts 43 in Fig. 2).

Regarding claim 7, Nakano also shows a stator support structure for an electric rotary machine wherein each of the first and second stator support members has a flow passage (87 and 88 in Fig. 4 and the portion between bolt 43 and hole 81) for passing coolant medium.

Regarding claim 9, Nakano also shows a stator support structure for an electric rotary machine wherein the first and second stator support members and the positioning projection members have flow passages (Fig. 2,4,5,7) to allow coolant medium to flow.

Regarding claim 10, Nakano also shows a stator support structure for an electric rotary machine wherein each of the stator coils is held in tight contact with adjacent surfaces of the first and second stator support members and the adjacent positioning projection members (inherent as can be seen in Fig. 2 and 8).

Regarding claim 11, Nakano also shows a stator support structure for an electric rotary machine wherein each of the stator cores has a flow passage (Fig. 7 and Col. 5, lines 20-30) formed around fixing bolts (43) for fixing the stator cores, each of the stator cores being treated with a sealing material (jacket 80) to form the flow passage for passing coolant medium.

Regarding claim 12, Nakano also shows a stator support structure for an electric rotary machine according to claim 2, wherein each of the stator cores is held in tight contact with the first and second stator support members and the positioning projection members (inherent as can be seen in Fig. 2 and 8).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakano.

Regarding claim 6, Nakano shows all limitations of the claimed invention except showing a stator support structure for an electric rotary machine wherein the first and second stator support members are made of a material having nonmagnetic and high heat conducting properties. It would have been obvious at the time the invention was made to a person having an ordinary skill in the art to use nonmagnetic material with high heat conducting properties in a cooling structure, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Regarding claim 8, Nakano shows all limitations of the claimed invention except showing a stator support structure for an electric rotary machine wherein each of the positioning projection members is integrally formed with one of the stator support members. It would have been obvious at the time the invention was made to a person having an ordinary skill in the art to have the projection members integrally formed with one of the stator support member, since it has been held that making an old device portable or movable without producing any new and unexpected result involves only routine skill in the art. In re Lindberg, 93 USPQ 23 (CCPA 1952).

Response to Arguments

5. Applicant's arguments filed on 10/25/2002 have been fully considered but they are not persuasive. The applicant's argument is on the ground that the reference

(Nakano) fails to disclose "a plurality of positioning projection members which are located between the first and second stator support members, wherein each of the positioning members remains between adjacent stator cores to allow the stator cores to be positioned with the given equal distance" and "the positioning projection members 31 allow the stator cores 5a to be correctly separated from one another with a given angular spacing to permit thermal energy to be rapidly transferred to the front and the rear stator support members". The Examiner respectfully disagrees with the Applicant. The Applicant is invited to consider that the bolt 43 is also a projecting member. As can be seen clearly in Fig. 4,5 7, the positioning projecting members or bolts 43 are distributed at equally angular spacing, remains between adjacent stator cores 21 to allow the stator cores to be positioned to the motor housing with the given equal distance. It is noted that the features upon which applicant relies (i.e., the positioning projection members allow the stator cores to be correctly separated from one another with a given angular spacing to permit thermal energy to be rapidly transferred to the front and the rear stator support members) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In short, the claims are interpreted as broad as possible and they still do not clearly and distinctly claim the subject matter of the invention. Therefore, the rejection is still deemed proper.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Information on How to Contact USPTO

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh N Nguyen whose telephone number is (703)305-3466. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner 's supervisor, Nestor Ramirez can be reached on (703)308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703)305-3431 for regular communications and (703)305-3431 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-1782.

HNN

January 6, 2003

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